

REMARKS

Claims 1-20 and 22-26 are currently pending in the present application. No new matter has been added by way of the present submission. For instance, claim 1 has been amended to include the textual language of claim 21 and accordingly claim 21 has been cancelled. Also, by way of cancellation of claim 21, the dependency of claim 22 has been changed to claim 1. Therefore, no new matter has been added.

No new issues have been raised which would require additional search and/or consideration on the part of the Examiner. For instance, Applicants are simply relying upon the language of claim 21, which has already been searched and considered. In the event that the present submission does not place the application into condition for allowance, entry thereof is respectfully requested as placing the application into better form for appeal.

In view of the following remarks, Applicants respectfully request that the Examiner withdraw all rejections and allow the currently pending claims.

Issue under 35 U.S.C. §102(b)

The Examiner has rejected claims 1-5, 7, 9-10, 12-20 and 23-25 under 35 U.S.C. §102(b) as being anticipated by Vogt et al. (U.S. Patent 6,274,570). Applicants respectfully traverse this rejection.

While not conceding to the Examiner's rejection, but to merely advance prosecution, claim 1 has been amended to include the non-rejected subject matter of claim 21 and further emphasize the distinctions between the present invention and the cited art.

By way of the present submission, it is respectfully submitted that the Vogt reference cited by the Examiner does not set forth each and every element as defined in the claims. Thus, the Examiner's rejection based on 35 U.S.C. §102(b) has been rendered moot.

Issues under 35 U.S.C. §103(a)

The Examiner has rejected claims 21 and 22 under 35 U.S.C. § 103(a) as being unpatentable over Vogt. Also, the Examiner has rejected claims 6, 8, 11 and 26 under 35 U.S.C.

§ 103(a) as being unpatentable over Vogt in view of Flahive USP 5,965,487. Applicants respectfully traverse these rejections.

Claim 1 of the present invention is directed to a microemulsion composition, comprising matalaxyl-M as active ingredient; emulsifier which essentially comprises polyoxyalkylene tristyrylphenyl ether, and further comprises one or more selected from the group consisting of calcium salt of alkylbenzene sulfonic acid and sodium salt of dialkyl succinic acid; one or more aqueous solvents selected from the group consisting of lower alcohol, glycol, glycol ether, lactone, pyrrolidone, amine and amide; and water, wherein the content of water is 5 to 50 weight %. The present invention is characterized in using aqueous solvent as well as 5 to 50 weight % of water to provide an environmentally-friendly and stable microemulsion.

In contrast, Vogt discloses a conventional emulsion concentrate composition comprising metalaxyl as a pesticide; and water-immiscible or water-miscible organic solvents (see column 1, line 61 to column 3, line 13) (also see paragraphs [12] and [13] of the PCT publication of the present application).

Specifically, Vogt discloses or suggests that the composition is substantially free of water and that the amount of water is less than 0.5% (see column 1, line 63; and column 2, lines 34-35). Vogt's compositions prepared by Examples 1 to 8 contain only water-immiscible or water-miscible organic solvents and do not contain water (see columns 5 and 6). Also, Vogt discloses or teaches that *even a small amount of water, when more than about 0.1%, is removed, for example, in a separator* (see column 2, lines 35-38).

Therefore, the technical constitution of the present invention—i.e., microemulsion comprising 5 to 50 weight % of water—is clearly distinct from that of Vogt's emulsion concentrate comprising a large quantity of water-insoluble organic solvent and a very small amount of water which is less than 0.5%.

With regard to this, the Examiner indicated that *Vogt also discloses that the gel composition can be diluted with water to obtain an emulsion composition which contains a larger amount of water and is stable (see column 6, lines 19-25; and claim 36), and therefore during the experiment one would use the amount of water as said by the applicant to obtain the microemulsion state of the composition* (see pages 7-8 of the outstanding Office Action).

However, Applicants respectfully submit that the above-mentioned “water” is not a solvent for the composition. The finished product of emulsion concentrate composition of Vogt does not contain water (see Examples 1-8) and even if water is present, the amount of water is less than 0.5%. When the emulsion concentrate composition of Vogt is actually applied to the plant, animal or locus as desired, it is diluted with “water” before the application (see column 4, lines 58-62). It is well known in the art that the emulsion concentrate composition is usually diluted with water before using. In this context, the microemulsion of the present invention is also diluted with water before using (see claim 24 or 25). Water, which is used in the diluting process, should not be considered as a technical component of the claimed composition. Therefore, the Examiner’s indication based on water component, which is used in the diluting process, is unreasonable.

In addition, the microemulsion of the present invention exhibits superior effects due to the use of 5 to 50 weight % of water as solvent, which cannot be predicted from the composition of Vogt.

First, the microemulsion of the present invention is safer in terms of toxicity compared with the emulsion concentrate composition of Vogt because the claimed composition contains only aqueous solvent and 5 to 50 weight % of water as another solvent while the Vogt compositions contain water-insoluble organic solvent. (see paragraph [0013] of the present specification).

Second, the microemulsion of the present invention has storage stability (or phase stability). The present inventors tested storage stability of microemulsions under a wide range of temperature conditions (-10 to 54¹C) for 2 weeks. As a result, the microemulsion of the present invention was not destroyed and maintained its transparent condition at severely low (-10¹C), low (0¹C) and high temperatures (40¹C and 54¹C). In contrast, the microemulsions of the Comparative Preparation samples were destroyed to cause phase separation (see Test 1; Tables 4 to 6 of the present specification).

Column 6, lines 19-20 of Vogt merely discloses that *all the compositions according to the examples are stable for at least 12 months at room temperature (25¹C)* without providing any objective experimental data. Vogt is completely silent on storage stability under a wide

range of temperature conditions including severely low (-10¹C), low (0¹C) and high temperatures (40¹C and 54¹C).

Third, the microemulsion of the present invention can provide a high content preparation wherein the content of the active ingredient is up to 60% (see Preparation No. 11 of the present specification). Also, the microemulsion of the present invention is economical because the diluting agent is water. In addition, due to the characteristic property of microemulsion, the property of the finished product does not vary depending on preparation process or equipment.

As explained above, the microemulsion of the present invention exhibits superior effects due to the use of 5 to 50 weight % of water as solvent. Therefore, claims 1-5, 7, 9, 10, 12-20 and 22-25 are inventive over Vogt. Moreover, the deficiencies of Vogt cannot be made up for by Flahive because Flahive still fails to disclose or suggest at least the claimed water content.

Therefore, the claimed microemulsion is not made obvious over the cited art individually or in combination.

Conclusion

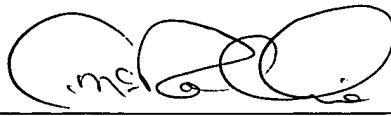
In light of the above remarks, since the amended independent claim 1 of the present application is believed to overcome the 35 USC §§ 102(b) and 103(a) rejections, the dependent claims therefrom are also believed to address the same rejections. Therefore, the Examiner is respectfully requested to withdraw these rejections and allow the pending application is in condition for allowance.

Should there be any outstanding matters that need to be resolved in the present application, the Examiner is respectfully requested to contact Craig A. McRobbie Reg. No. 42,874 at the telephone number of the undersigned below, to conduct an interview in an effort to expedite prosecution in connection with the present application.

If necessary, the Commissioner is hereby authorized in this, concurrent, and future replies to charge payment or credit any overpayment to Deposit Account No. 02-2448 for any additional fees required under 37.C.F.R. §§1.16 or 1.17; particularly, extension of time fees.

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Respectfully submitted,

By 

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